

ABSTRACT OF THE DISCLOSURE

The object of the present invention is to obtain a high precision notch filter or all-pass filter. Therefore, two transconductance circuits for adjustment, which perform a voltage-current conversion of a difference between a voltage of a filter input terminal and a voltage of a filter output terminal, are added to two integrators comprising two transconductance circuits for the integrators, and two capacitors. An output current of one transconductance circuit for adjustment is added to an output current of the transconductance circuit for the integrators, and an output current of the other transconductance circuit for adjustment is subtracted from an output current of the transconductance circuit for the integrators. Therefore, by adjusting conductance values of the two transconductance circuits for adjustment, even when non-ideal characteristics would exist in the transconductance circuits for the integrators, those can be canceled.